AUTHOR INDEX

(D) Denotes Demonstration (T) Title only

ADAMS D.J. & COLQUHOUN D. Current relaxations with high agonist concentrations. Do acetylcholine and suberyldicholine block ion channels in frog muscle? 22*P*

ADAMS D.J. & BEVAN S. Acetylcholine receptors in cultured human myotubes: distribution and single-channel properties. 25*P*

ADAMS E.F., BLOOM S.R., CH'NG J.L.C., JOPLIN G.F., MASHITER K., WEBSTER J.D. & WOOD S.M. Effects of a human pancreatic growth-hormone releasing factor on growth-hormone secretion in man. 84*P*

AICKIN C. Claire & BRADING Alison F. Are other monovalent anions transported by the Cl-HCO_3 exchange carrier of smooth muscle of the guinea-pig vas deferens? 24*P*

AKAIKE Norio, HIRATA Akira, KIYOHARA Toshikazu & OYAMA Yasuo Neural regulation on the active sodium–potassium transport in hypokalaemic rat skeletal muscles. 245

AL-OMAR AZZAWI S. & SHIRLEY D.G. The effect of vasopressin on renal blood flow and its distribution in the rat. 233

ALLEN A., GARNER A., HUTTON D. & MCQUEEN S. Thickness of the adherent mucus gel layer in the stomach and duodenum: comparison with surface pH gradients in the rat and frog. 66*P*

ALLEN Y., BISCOE T.J., FRY J.P., RICKETS C. & ROBBINS J. Quantitative autoradiography of benzodiazepine binding in the central nervous system of the mutant mouse *Spastic*. (D) (T) 8*P*

ANGEL A. Programmes for looking at evoked activity in the central nervous system. (D) (T) 7*P*

ANGEL Fabielle, GO V.L.W., SCHMALZ P.F. & SZURSZEWSKI J.H. Vasoactive intestinal peptide: a putative transmitter in the canine gastric muscularis mucosa. 641

ARDEN G.B. & VAEGAN Electroretinograms evoked in man by local uniform or patterned stimulation. 85

ATTWELL D.I., WERBLIN Frank S., WILSON Martin & WU Samuel M. Properties of double cones in the larval salamander retina. 74*P*

BABIJ P., GERBER P.P.G. & RENNIE M.J. The effect of fasting on ammonia and amino acid balance of rat hindlimb tissue. 70*P*

BAKER P.F. & UMBACH J. A. Calcium electrode determination of ionized Ca and Ca-buffering capacity of squid axoplasm. 61*P*

BANKS R.W. A morphometric study of intrafusal motor endings in the cat. 15*P*

BARASI S. & LYNN B. Effects of sympathetic stimulation on mechanoreceptor and nociceptor afferent units with small myelinated (A-δ) and unmyelinated (C) axons innervating the rabbit pinna. 51*P*

BEGENT N.A. & BORN G.V.R. Further evidence that haemostasis depends more on ADP than on thromboxane A_2 in the rat. 36*P*

BENHAM C.D., BOLTON T.B. & LANG R.J. Patch-clamp studies of the action of K^+-channel blockers on two types of K^+ channel in dispersed smooth muscle cells of rabbit jejunum. 23*P*

BERGER W. & DIETZ V. Corrective reactions to disturbance of stance and gait studied in man. 33*P*

BERRY D.J., JEFFERY G., LIEBERMAN A.R. & OHARA P.T. Relationships between the thalamic reticular nucleus and the brain stem reticular formation in the rat: a retrograde and anterograde tracing study using horseradish peroxidase (HRP) and wheat germ agglutinin-HRP (WGA-HRP). 54*P*

BERTHON Brigitte, BURGESS Gillian M., CAPIOD T., CLARET M. & POGGIOLI Josiane Mechanism of action of noradrenaline on the sodium–potassium pump in isolated rat liver cells. 25

BEVAN S. *see* ADAMS D.J. & BEVAN S. Acetylcholine receptors in cultured human myotubes: distribution and single-channel properties. 25*P*

BINDMAN Lynn J. & PRINCE C.A. Intracellular recording from neurones in the cerebral cortex of the anaesthetized rat. (D) 7*P*

BISCOE T.J., DUCHEN M.R. & PASCOE J.E. Use of the RML 380Z microcomputer for on-line measurement of input resistance of cells in the mouse hippocampal slice. (D) 2*P*

BISCOE T.J. *see* ALLEN Y., BISCOE T.J., FRY J.P., RICKETS C. & ROBBINS J. Quantitative autoradiography of benzodiazepine binding in the central nervous system of the mutant mouse *Spastic*. (D) (T) 8*P*

BISCOE T.J., DUCHEN M.R. & PASCOE J.E. GABA/Benzodiazepine interactions in the mouse hippocampal slice. 8P

BLISS T.V.P., LANCASTER B. & WHEAL H.V. Long-term potentiation in commissural and Schaffer projections to hippocampal CA1 cells: an *in vivo* study in the rat. 617

BLOOM S.R. *see* ADAMS E.F., BLOOM S.R., CH'NG J.L.C., JOPLIN G.F., MASHITER K., WEBSTER J.D. & WOOD S.M. Effects of a human pancreatic growth-hormone releasing factor on growth-hormone secretion in man. 84P

BOLTON T.B. *see* BENHAM C.D., BOLTON T.B. & LANG R.J. Patch-clamp studies of the action of K^+-channel blockers on two types of K^+ channel in dispersed smooth muscle cells of rabbit jejunum. 23P

BORMANN J., SAKMANN B. & SIEFERT W. Isolation of GABA-activated single-channel Cl^- currents in the soma membrane of rat hippocampal neurones. 9P

BORN G.V.R. *see* BEGENT N.A. & BORN G.V.R. Further evidence that haemostasis depends more on ADP than on thromboxane A_2 in the rat. 36P

BORNSTEIN J.C., COSTA M., FURNESS J.B. & LEES G.M. Correlation of the electrophysiology, morphology and enkephalin-immunoreactivity of neurones in guinea-pig myenteric plexus. 59P

BOSTOCK H., SEARS T.A. & SHERRATT R.M. The spatial distribution of excitability and membrane current in normal and demyelinated mammalian nerve fibres. 41

BOSTOCK H. The strength–duration relationship for excitation of myelinated nerve: computed dependence on membrane parameters. 59

BOWMAN Anne & GILLESPIE J.S. Neurogenic vasodilatation in isolated bovine and canine penile arteries. 603

BRADING Alison F. *see* AICKIN C. Claire & BRADING Alison F. Are other monovalent anions transported by the Cl-HCO_3 exchange carrier of smooth muscle of the guinea-pig vas deferens? 24P

BROWN A.M. & JOHNSTON Marilynn J. Stimulation of lactate production by Ca + ionophore A23187 in inosine-fed human red cells. 63P

BROWN D.A., DOCHERTY R.J. & HALLIWELL J.V. Chemical transmission in the rat interpeduncular nucleus *in vitro*. 655

BROWNING J.G. & HENMAN F.D. Peripheral ganglia – new ideas concerning possible sites of action for gastric antisecretory agents. 68P

BURGESS Gillian M. *see* BERTHON Brigitte, BURGESS Gillian M., CAPIOD T., CLARET M. & POGGIOLI Josiane Mechanism of action of noradrenaline on the sodium–potassium pump in isolated rat liver cells. 25

BURNE J.A., DARTON K. & LIPPOLD O.C.J. Method for determining the role of proprioceptors in generating tremor. (D) 2P

CADDY K.W.T. & PATTERSON D.L. Application of a monoclonal antibody to explore cerebellar mouse mutants and development. (D) (T) 3P

CAPIOD T. *see* BERTHON Brigitte, BURGESS Gillian M., CAPIOD T., CLARET M. & POGGIOLI Josiane Mechanism of action of noradrenaline on the sodium–potassium pump in isolated rat liver cells. 25

CERVERO F. & WOLSTENCROFT J.H. Spinal cord neurones in the cat projecting to and excited from nucleus raphe magnus and the adjacent reticular formation. 55P

CERVETTO L. & MCNAUGHTON P.A. Inhibition of the light-sensitive current in vertebrate rods by La^{3+} ions. 75P

CHAPMAN B.J., CHEN C.F. & MUNDAY K.A. Effects of anaesthetic agents on renal function in rats and on the renal responses to an acute intravenous saline load. 64P

CHAPMAN B.J., MUNDAY K.A. & RADHI A.R.A.H. The effects of renal nerve stimulation in rats treated with α-adrenergic and dopaminergic blockers. 65P

CHATAMRA K., DANIEL P.M. & LAM D.K.C. The weights of the gastrointestinal tract and its contents in rats made diabetic with streptozotocin. 72P

CHEN C.F. *see* CHAPMAN B.J., CHEN C.F. & MUNDAY K.A. Effects of anaesthetic agents on renal function in rats and on the renal responses to an acute intravenous saline load. 64P

CHEN M.H., JOFFE S.N., MAGEE D.F., MURPHY R.F. & NARUSE S. Cyclic changes of plasma pancreatic polypeptide and pancreatic secretion in fasting dogs. 453

CH'NG J.L.C. *see* ADAMS E.F., BLOOM S.R., CH'NG J.L.C., JOPLIN G.F., MASHITER K., WEBSTER J.D. & WOOD S.M. Effects of a human pancreatic growth-hormone releasing factor on growth-hormone secretion in man. 84P

CHRISTAKOS C.N., ROST I. & WINDHORST U. Modulation of muscle stretch receptor discharge by motor unit activity in the cat as revealed by spectral analysis. 17P

CLARET M. *see* BERTHON Brigitte, BURGESS Gillian M., CAPIOD T., CLARET M. & POGGIOLI Josiane Mechanism of action of noradrenaline on the sodium–potassium pump in isolated rat liver cells. 25

CLARK R.W. & MATTHEWS B. A comparison of the excitability of trigeminal brain-stem neurones in acutely and chronically prepared cats. 52P

CLARKE J.A., DUFF M.J.B. & IP H.H.-S. Reconstruction of the vascular system of the carotid body of the rat using an array processor. (D) 6P

CLEWLOW F., DAWES G.S., JOHNSTON Barbara M. & WALKER D.W. Changes in breathing, electrocortical and muscle activity in unanaesthetized fetal lambs with age. 463

COLE J.D. & GORDON G. Timing of corticofugal actions on the gracile and cuneate nuclei of the cat. 139

COLOMO F., LOMBARDI V. & MENCHETTI G. Effects of AR-L 115BS on development of force-velocity relation and of isometric tension in frog single muscle fibres. 39P

COLQUHOUN D. *see* ADAMS D.J. & COLQUHOUN D. Current relaxations with high agonist concentrations. Do acetylcholine and suberyldicholine block ion channels in frog muscle? 22P

COSTA M. *see* BORNSTEIN J.C., COSTA M., FURNESS J.B. & LEES G.M. Correlation of the electrophysiology, morphology and enkephalin-immunoreactivity of neurones in guinea-pig myenteric plexus. 59P

COWAN J., DAY B.L., MARSDEN C.D. & ROTHWELL J.C. Effect of sub-threshold motor cortical shocks on the human spinal monosynaptic reflex. 32P

CRAGG Patricia A. & DRYSDALE D.B. Interaction of hypoxia and hypercapnia on ventilation, tidal volume and respiratory frequency in the anaesthetized rat. 477

CRUNELLI Vincenzo, FORDA Susan & KELLY John S. Blockade of amino acid-induced depolarizations and inhibition of excitatory post-synaptic potentials in rat dentate gyrus. 627

DALY M. De Burgh & WOOD L.M. Effects of distension of the urinary bladder on the respiratory and cardiovascular responses elicited by stimulation of the carotid body chemoreceptors in the dog. 47P

DANIEL P.M. *see* CHATAMRA K., DANIEL P.M. & LAM D.K.C. The weights of the gastrointestinal tract and its contents in rats made diabetic with streptozotocin. 72P

DARTON K. *see* BURNE J.A., DARTON K. & LIPPOLD O.C.J. Method for determining the role of proprioceptors in generating tremor. (D) 2P

DAUNCEY M.J., INGRAM D.L., JAMES P.S. & SMITH M.W. Modification by diet and environmental temperature of enterocyte function in piglet intestine. 441

DAVIES C.T.M. & WHITE M.J. Effects of disuse muscular atrophy on the mechanical properties of triceps surae in man. 34P

DAVIES S.N. Effects of sympathetic stimulation on the discharge of trigeminal thermoreceptive and mechanoreceptive cells in the rat. 50P

DAVIS A.J., MAULE WALKER Felicity M. & SAUNDERS J.C. The role of prolactin in the control of the onset of copious milk secretion in the goat. 83P

DAWES G.S. *see* CLEWLOW F., DAWES G.S., JOHNSTON Barbara M. & WALKER D.W. Changes in breathing, electrocortical and muscle activity in unanaesthetized fetal lambs with age. 463

DAWSON N.J., HELLON R.F. & SAUMET J.-L. Which classes of neurones project to the thalamus from the marginal layer of trigeminal nucleus caudalis in cats? 49P

DAY B.L. *see* COWAN J., DAY B.L., MARSDEN C.D. & ROTHWELL J.C. Effect of sub-threshold motor cortical shocks on the human spinal monosynaptic reflex. 32P

DECKTOR D.L. & WEEMS W.A. An intracellular characterization of neurones and neural connexions within the left coeliac ganglion of cats. 197

DEKIN Michael S. Permeability changes induced by L-glutamate at the crayfish neuromuscular junction. 105

DEKIN Michael S. & EDWARDS Charles Voltage-dependent drug blockade of L-glutamate activated channels of the crayfish. 127

DÉLÈZE J. & RAKOTONIRINA V.S. Membrane potential, contractile activity and repriming of frog muscle fibres in solutions of low ionic content. 42P

DIETZ V. *see* BERGER W. & DIETZ V. Corrective reactions to disturbance of stance and gait studied in man. 33P

DJAMGOZ M.B.A. & DOWNING J.E.G. A quantitative analysis of cone photoreceptor-horizontal cell connectivity patterns at ribbon synapses in a cyprinid fish (roach) retina. 75P

DOCHERTY R.J. *see* BROWN D.A., DOCHERTY R.J. & HALLIWELL J.V. Chemical transmission in the rat interpeduncular nucleus *in vitro*. 655

DOWNING J.E.G. *see* DJAMGOZ M.B.A. & DOWNING J.E.G. A quantitative analysis of cone photoreceptor-horizontal cell connectivity patterns at ribbon synapses in a cyprinid fish (roach) retina. 75*P*

DRYSDALE D.B. *see* CRAGG Patricia A. & DRYSDALE D.B. Interaction of hypoxia and hypercapnia on ventilation, tidal volume and respiratory frequency in the anaesthetized rat. 477

DUCHEN M.R. *see* BISCOE T.J., DUCHEN M.R. & PASCOE J.E. Use of the RML 380Z microcomputer for on-line measurement of input resistance of cells in the mouse hippocampal slice. (D) 2*P*

DUCHEN M.R. *see* BISCOE T.J., DUCHEN M.R. & PASCOE J.E. GABA/Benzodiazepine interactions in the mouse hippocampal slice. 8*P*

DUFF M.J.B. *see* CLARKE J.A., DUFF M.J.B. & IP H.H.-S. Reconstruction of the vascular system of the carotid body of the rat using an array processor. (D) 6*P*

DULHUNTY Angela F. & GAGE Peter W. Asymmetrical charge movement in slow- and fast-twitch mammalian muscle fibres in normal and paraplegic rats. 213

EDMAN K.A.P. & REGGIANI C. The descending limb of the length-tension relation studied in short, length-clamped segments of frog muscle fibres. 41*P*

EDMONDS C.J., EDWARDS R.H.T., MACKENZIE Jennifer & SMITH T. Changes of body composition in muscular dystrophy. 71*P*

EDWARDS Charles *see* DEKIN Michael S. & EDWARDS Charles Voltage-dependent drug blockade of L-glutamate activated channels of the crayfish. 127

EDWARDS R.H.T. *see* EDMONDS C.J., EDWARDS R.H.T., MACKENZIE Jennifer & SMITH T. Changes of body composition in muscular dystrophy. 71*P*

EISENBERG Robert S., MCCARTHY Richard T. & MILTON Richard L. Paralysis of frog skeletal muscle fibres by the calcium antagonist D-600. 495

EISNER D.A., LEDERER W.J. & VAUGHAN-JONES R.D. The relationship between twitch tension and intracellular Na activity in sheep cardiac Purkinje fibres. 28*P*

ELLAWAY P.H., GARDNER-MEDWIN A.R. & PASCOE J.E. Decision limits for significance of changes in the cumulative sum (cusum) of the peristimulus time histogram. (D) 4*P*

ENROTH-CUGELL Christina, ROBSON J.G., SCHWEITZER-TONG D.E. & WATSON A.B. Spatio-temporal interactions in cat retinal ganglion cells showing linear spatal summation. 279

ENTWISTLE A., WARNER Anne & ZALIN Rosalind Is avaian myoblast fusion controlled by voltage-dependent calcium entry? 21*P*

EVANS M.G. & THOMAS R.C. The effects of acid solutions on intracellular pH and Na in snail neurones. 60*P*

EVERITT B.J., LIGHTMAN S.L. & TODD K. Brain stem noradrenergic pathways modulate vasopressin secretion in the rat. 81*P*

FEDIDA David A computer model of the ionic currents and the electrogenic Na pump in cardiac Purkinje strands predicts action potential changes during repetitive excitation. 27*P*

FENN C.E., LEIPER J.B., LIGHT I.M. & MAUGHAN R.J. Effects of the oral administration of fluid, electrolytes and substrate on endurance capacity in man. 66*P*

FERENCZI M.A., HOMSHER E. & TRENTHAM D.R. A new method for measuring the kinetics of adenosine triphosphate (ATP) cleavage in single glycerinated rabbit muscle fibres. 37*P*

FERSTER D. & LINDSTRÖM S. Synaptic effects mediated by intracortical axon collaterals of cortico-geniculate neurones in area 17 of the cat. 79*P*

FETZ E.E. & GUSTAFSSON B. Relation between shapes of post-synaptic potentials and changes in firing probability of cat motoneurones. 387

FETZ E.E. & SAWYER S.L. Facilitation of individual forelimb motor units by single intracortical microstimuli in behaving monkeys. 19*P*

FITZGERALD Maria The development of C-fibre function in neonatal rats. 58*P*

FLATMAN Peter W. Sodium and potassium transport in ferret red cells. 545

FORDA Susan *see* CRUNELLI Vincenzo, FORDA Susan & KELLY John S. Blockade of amino acid-induced depolarizations and inhibition of excitatory post-synaptic potentials in rat dentate gyrus. 627

FOSTER Margaret & KNIGHT C.H. Nuclear magnetic resonance (NMR) imaging: a non-invasive technique for measuring mammary gland development. 82*P*

FRY J.P. *see* ALLEN Y., BISCOE T.J., FRY J.P., RICKETS C. & ROBBINS J. Quantitative autoradiography of benzodiazepine binding in the central nervous system of the mutant mouse *Spastic*. (D) (T) 8*P*

FURNESS J.B. *see* BORNSTEIN J.C., COSTA M., FURNESS J.B. & LEES G.M. Correlation of the electrophysiology, morphology and enkephalin-immunoreactivity of neurones in guinea-pig myenteric plexus. 59*P*

GAGE Peter W. *see* DULHUNTY Angela F. & GAGE Peter W. Asymmetrical charge movement in slow- and fast-twitch mammalian muscle fibres in normal and paraplegic rats. 213

GARDNER-MEDWIN A.R. *see* ELLAWAY P.H., GARDNER-MEDWIN A.R. & PASCOE J.E. Decision limits for significance of changes in the cumulative sum (cusum) of the peristimulus time histogram. (D) 4*P*

GARDNER-MEDWIN A.R. The ionic basis of membrane potentials and cellular equilibrium: a computer model for teaching. (D) 5*P*

GARNER A. *see* ALLEN A., GARNER A., HUTTON D. & MCQUEEN S. Thickness of the adherent mucus gel layer in the stomach and duodenum: comparison with surface pH gradients in the rat and frog. 66*P*

GERBER P.P.G. *see* BABIJ P., GERBER P.P.G. & RENNIE M.J. The effect of fasting on ammonia and amino acid balance of rat hindlimb tissue. 70*P*

GILLESPIE J.S. *see* BOWMAN Anne & GILLESPIE J.S. Neurogenic vasodilatation in isolated bovine and canine penile arteries. 603

GINESI Laura M. & NOBLE A.R. Effect of ouabain on release of active and inactive renin by rabbit kidney cortex slices. 86*P*

GLICKSTEIN M., HARDIMAN M.J. & YEO C.H. The effects of cerebellar lesions on the conditioned nictitating membrane response of the rabbit. 30*P*

GLICKSTEIN M., MERCIER Barbara & WHITTERIDGE D. The striate cortex input to the macaque pons: selectivity and demagnification. 77*P*

GO V.L.W. *see* ANGEL Fabielle, GO V.L.W., SCHMALZ P.F. & SZURSZEWSKI J.H. Vasoactive intestinal peptide: a putative transmitter in the canine gastric muscularis mucosa. 641

GOLDMAN Y.E. & HIBBERD M.G. Ca^{2+}-dependence of tension transients initiated by photolysis of caged adenosine triphosphate in rabbit skinned muscle fibres. 38*P*

GORDON G. *see* COLE J.D. & GORDON G. Timing of corticofugal actions on the gracile and cuneate nuclei of the cat. 139

GRIFFITHS Nina & LAMB J.F. Relation between free sodium pump sites and K influx under steady state conditions in HeLa cells grown in cardiac glycosides. (T) 63*P*

GRIGGS R.C., MATTHEWS S.M., RENNIE M.J. & SUTTON J.R. Carbohydrate and fat metabolism at rest and during isometric forearm exercise in fed and fasted man. 69*P*

GUSTAFSSON B. *see* FETZ E.E. & GUSTAFSSON B. Relation between shapes of post-synaptic potentials and changes in firing probability of cat motoneurones. 387

HALLIWELL J.V. *see* BROWN D.A., DOCHERTY R.J. & HALLIWELL J.V. Chemical transmission in the rat interpeduncular nucleus *in vitro*. 655

HALLIWELL J.V. Caesium-loading reveals two distinct Ca-currents in voltage-clamped guinea-pig hippocampal neurones *in vitro*. 10*P*

HARDIMAN M.J. *see* GLICKSTEIN M., HARDIMAN M.J. & YEO C.H. The effects of cerebellar lesions on the conditioned nictitating membrane response of the rabbit. 30*P*

HARKNESS R.D. & MAROUDAS N.G. Organizing a search: a modified random-walk model for the nest of an ant (*Cataglyphis bicolor* Fab). 73*P*

HATA Fumiaki, ISHIDA Hajime, KAGAWA Kimiya, KONDO Etsuo, KONDO Shigeru & NOGUCHI Yutaka β-adrenoceptor alterations coupled with secretory response in rat parotid tissue. 185

HAYDON D.A. & URBAN B.W. The action of alcohols and other non-ionic surface active substances on the sodium current of the squid giant axon. 411

HAYDON D.A. & URBAN B.W. The effects of some inhalation anaesthetics on the sodium current of the squid giant axon. 429

HELLON R.F. *see* DAWSON N.J., HELLON R.F. & SAUMET J.-L. Which classes of neurones project to the thalamus from the marginal layer of trigeminal nucleus caudalis in cats? 49*P*

HENMAN F.D. *see* BROWNING J.G. & HENMAN F.D. Peripheral ganglia – new ideas concerning possible sites of action for gastric antisecretory agents. 68*P*

HIBBERD M.G. *see* GOLDMAN Y.E. & HIBBERD M.G. Ca^{2+}-dependence of tension transients initiated by photolysis of caged adenosine triphosphate in rabbit skinned muscle fibres. 38*P*

HIRATA Akira *see* AKAIKE Norio, HIRATA Akira, KIYOHARA Toshikazu & OYAMA Yasuo Neural regulation on the active sodium–potassium transport in hypokalaemic rat skeletal muscles. 245

HOMSHER E. *see* FERENCZI M.A., HOMSHER E. & TRENTHAM D.R. A new method for measuring the kinetics of adenosine triphosphate (ATP) cleavage in single glycerinated rabbit muscle fibres. 37*P*

HUANG C.L.-H. Time domain spectroscopy of the membrane capacitance in frog skeletal muscle. 1

HUTTON D. *see* ALLEN A., GARNER A., HUTTON D. & MCQUEEN S. Thickness of the adherent mucus gel layer in the stomach and duodenum: comparison with surface pH gradients in the rat and frog. 66*P*

ILES J.F. & ROBERTS R.C. Presynaptic inhibition of monosynaptic reflexes from soleus muscle in spastic human subjects. 29*P*

INGRAM D.L. *see* DAUNCEY M.J., INGRAM D.L., JAMES P.S. & SMITH M.W. Modification by diet and environmental temperature of enterocyte function in piglet intestine. 441

IP H.H.-S. *see* CLARKE J.A., DUFF M.J.B. & IP H.H.-S. Reconstruction of the vascular system of the carotid body of the rat using an array processor. (D) 6*P*

ISHIDA Hajime *see* HATA Fumiaki, ISHIDA Hajime, KAGAWA Kimiya, KONDO Etsuo, KONDO Shigeru & NOGUCHI Yutaka β-adrenoceptor alterations coupled with secretory response in rat parotid tissue. 185

ITO S. Time course of release of catecholamine and other granular contents from perifused adrenal chromaffin cells of guinea-pig. 153

JACOB T.J.C. Raised intracellular free calcium within the lens causes opacification and cellular uncoupling in the frog. 595

JAMES P.S. *see* DAUNCEY M.J., INGRAM D.L., JAMES P.S. & SMITH M.W. Modification by diet and environmental temperature of enterocyte function in piglet intestine. 441

JAMI Léna, PETIT J., PROSKE U. & ZYTNICKI D. 'Driving' of tendon organ discharges during low-frequency stimulation of fast-contracting motor units in cat muscles. 18*P*

JANCSÓ G. & SUCH G. Effects of capsaicin applied perineurally to the vagus nerve on cardiovascular and respiratory functions in the cat. 359

JEEVES M.A., MILNER A.D., PERRETT D.I. & SMITH P.A.J. Visual cells responsive to direction of movement and stimulus form in the anterior superior temporal sulcus of the macaque monkey. 80*P*

JEFFERY G. *see* BERRY D.J., JEFFERY G., LIEBERMAN A.R. & OHARA P.T. Relationships between the thalamic reticular nucleus and the brain stem reticular formation in the rat: a retrograde and anterograde tracing study using horseradish peroxidase (HRP) and wheat germ agglutinin-HRP (WGA-HRP). 54*P*

JOFFE S.N. *see* CHEN M.H., JOFFE S.N., MAGEE D.F., MURPHY R.F. & NARUSE S. Cyclic changes of plasma pancreatic polypeptide and pancreatic secretion in fasting dogs. 453

JOHNSTON Barbara M. *see* CLEWLOW F., DAWES G.S., JOHNSTON Barbara M. & WALKER D.W. Changes in breathing, electrocortical and muscle activity in unanaesthetized fetal lambs with age. 463

JOHNSTON Marilynn J. *see* BROWN A.M. & JOHNSTON Marilynn J. Stimulation of lactate production by Ca+ionophore A23187 in inosine-fed human red cells. 63*P*

JOPLIN G.F. *see* ADAMS E.F., BLOOM S.R., CH'NG J.L.C., JOPLIN G.F., MASHITER K., WEBSTER J.D. & WOOD S.M. Effects of a human pancreatic growth-hormone releasing factor on growth-hormone secretion in man. 84*P*

KAGAWA Kimiya *see* HATA Fumiaki, ISHIDA Hajime, KAGAWA Kimiya, KONDO Etsuo, KONDO Shigeru & NOGUCHI Yutaka β-adrenoceptor alterations coupled with secretory response in rat parotid tissue. 185

KATOH K., NAKASATO M., NISHIYAMA A. & SAKAI M. Activation of potassium transport induced by secretagogues in superfused submaxillary gland segments of rat and mouse. 371

KATOVICH Michael J. & SIMPKINS James W. Effects of chronic hyperprolactinaemia on experimentally induced thirsts in male rats. 75

KELLY John S. *see* CRUNELLI Vincenzo, FORDA Susan & KELLY John S. Blockade of amino acid-induced depolarizations and inhibition of excitatory post-synaptic potentials in rat dentate gyrus. 627

KITNEY R.I., MIALL R.C., RIDDELL P.M. & STEIN J.F. Frequency analysis of neuronal signals recorded from the cerebellum in trained monkeys. 31*P*

KIYOHARA Toshikazu *see* AKAIKE Norio, HIRATA Akira, KIYOHARA Toshikazu & OYAMA Yasuo Neural regulation on the active sodium–potassium transport in hypokalaemic rat skeletal muscles. 245

KNEPEL W. & MEYER D.K. The effect of naloxone on vasopressin release from rat neurohypophysis incubated *in vitro*. 507

KNIGHT C.H. *see* FOSTER Margaret & KNIGHT C.H. Nuclear magnetic resonance (NMR) imaging: a non-invasive technique for measuring mammary gland development. 82*P*

KNOX C.K. & PASSATORE M. Static and dynamic analysis of cat pulmonary stretch receptors. (T) 87*P*

KONDO Etsuo *see* HATA Fumiaki, ISHIDA Hajime, KAGAWA Kimiya, KONDO Etsuo, KONDO Shigeru & NOGUCHI Yutaka β-adrenoceptor alterations coupled with secretory response in rat parotid tissue. 185

KONDO Shigeru *see* HATA Fumiaki, ISHIDA Hajime, KAGAWA Kimiya, KONDO Etsuo, KONDO Shigeru & NOGUCHI Yutaka β-adrenoceptor alterations coupled with secretory response in rat parotid tissue. 185

KONISHI T. & SEARS T.A. Electrical activity of mouse motor nerve terminals. 57*P*

KOVÁCS L., SCHÜMPERLI R.A. & SZŰCS G. Comparison of birefringence signals and calcium transients in voltage-clamped cut skeletal muscle fibres of the frog. 579

KOVÁCS L. & SZŰCS G. Effect of caffeine on intramembrane charge movement and calcium transients in cut skeletal muscle fibres of the frog. 559

KUFFLER S.W. & SEJNOWSKI T.J. Peptidergic and muscarinic excitation at amphibian sympathetic synapses. 257

KUMAR P. & NYE P.C.G. Chemoreceptor discharge in alternate breath tube- antitube-breathing cats. 48*P*

LAM D.K.C. *see* CHATAMRA K., DANIEL P.M. & LAM D.K.C. The weights of the gastrointestinal tract and its contents in rats made diabetic with streptozotocin. 72*P*

LAMB J.F. *see* GRIFFITHS Nina & LAMB J.F. Relation between free sodium pump sites and K influx under steady state conditions in HeLa cells grown in cardiac glycosides. (T) 63*P*

LANCASTER B. *see* BLISS T.V.P., LANCASTER B. & WHEAL H.V. Long-term potentiation in commissural and Schaffer projections to hippocampal CA1 cells: an *in vivo* study in the rat. 617

LANG R.J. *see* BENHAM C.D., BOLTON T.B. & LANG R.J. Patch-clamp studies of the action of K^+-channel blockers on two types of K^+ channel in dispersed smooth muscle cells of rabbit jejunum. 23*P*

LEDERER W.J. & NELSON M.T. Effects of extracellular sodium on calcium efflux and membrane current in single muscle cells from the barnacle. 325

LEDERER W.J. *see* EISNER D.A., LEDERER W.J. & VAUGHAN-JONES R.D. The relationship between twitch tension and intracellular Na activity in sheep cardiac Purkinje fibres. 28*P*

LEES G.M. *see* BORNSTEIN J.C., COSTA M., FURNESS J.B. & LEES G.M. Correlation of the electrophysiology, morphology and enkephalin-immunoreactivity of neurones in guinea-pig myenteric plexus. 59*P*

LEIGHTON M.J. & WOOSTER M.J. Guinea-pig olfactory cortex slices under hyperbaric conditions. (D) 3*P*

LEIPER J.B. *see* FENN C.E., LEIPER J.B., LIGHT I.M. & MAUGHAN R.J. Effects of the oral administration of fluid, electrolytes and substrate on endurance capacity in man. 66*P*

LEWIS S.A. & WILLS N.K. Apical membrane permeability and kinetic properties of the sodium pump in rabbit urinary bladder. 169

LIEBERMAN A.R. *see* BERRY D.J., JEFFERY G., LIEBERMAN A.R. & OHARA P.T. Relationships between the thalamic reticular nucleus and the brain stem reticular formation in the rat: a retrograde and anterograde tracing study using horseradish peroxidase (HRP) and wheat germ agglutinin-HRP (WGA-HRP). 54*P*

LIGHT I.M. *see* FENN C.E., LEIPER J.B., LIGHT I.M. & MAUGHAN R.J. Effects of the oral administration of fluid, electrolytes and substrate on endurance capacity in man. 66*P*

LIGHTMAN S.L. *see* EVERITT B.J., LIGHTMAN S.L. & TODD K. Brain stem noradrenergic pathways modulate vasopressin secretion in the rat. 81*P*

LINDSTRÖM S. *see* FERSTER D. & LINDSTRÖM S. Synaptic effects mediated by intracortical axon collaterals of cortico-geniculate neurones in area 17 of the cat. 79*P*

LIPPOLD O.C.J. *see* BURNE J.A., DARTON K. & LIPPOLD O.C.J. Method for determining the role of proprioceptors in generating tremor. (D) 2*P*

LOMBARDI V. *see* COLOMO F., LOMBARDI V. & MENCHETTI G. Effects of AR-L 115BS on development of force-velocity relation and of isometric tension in frog single muscle fibres. 39*P*

LOPACHIN Richard M. & RUDY T.A. Sites and mechanism of action for the effects of intrathecal noradrenaline on thermoregulation in the rat. 527

LYNN B. *see* BARASI S. & LYNN B. Effects of sympathetic stimulation on mechanoreceptor and nociceptor afferent units with small myelinated (A-δ) and unmyelinated (C) axons innervating the rabbit pinna. 51*P*

MCCARTHY Richard T. *see* EISENBERG Robert S., MCCARTHY Richard T. & MILTON Richard L. Paralysis of frog skeletal muscle fibres by the calcium antagonist D-600. 495

MCHALE N.G. & RODDIE I.C. The effect of intravenous adrenaline and noradrenaline infusion on peripheral lymph flow in the sheep. 517

MACKENZIE Jennifer *see* EDMONDS C.J., EDWARDS R.H.T., MACKENZIE Jennifer & SMITH T. Changes of body composition in muscular dystrophy. 71*P*

McMAHON S.B. & WALL P.D. The effects of capsaicin applied locally to the peripheral nerves of adult rats on lamina I neurones. 53*P*

McNAUGHTON P.A. *see* CERVETTO L. & McNAUGHTON P.A. Inhibition of the light-sensitive current in vertebrate rods by La^{3+} ions. 75*P*

McQUEEN S. *see* ALLEN A., GARNER A., HUTTON D. & McQUEEN S. Thickness of the adherent mucus gel layer in the stomach and duodenum: comparison with surface pH gradients in the rat and frog. 66*P*

MAGEE D.F. *see* CHEN M.H., JOFFE S.N., MAGEE D.F., MURPHY R.F. & NARUSE S. Cyclic changes of plasma pancreatic polypeptide and pancreatic secretion in fasting dogs. 453

MAIRE J.C., MEDILANSKI J. & STRAUB R.W. Effect of calcium ions on the release of purines by electrical activity in rabbit vagus nerve. 13*P*

MAROUDAS N.G. *see* HARKNESS R.D. & MAROUDAS N.G. Organizing a search: a modified random-walk model for the nest of an ant (*Cataglyphis bicolor* Fab). 73*P*

MARSDEN C.D. *see* COWAN J., DAY B.L., MARSDEN C.D. & ROTHWELL J.C. Effect of sub-threshold motor cortical shocks on the human spinal monosynaptic reflex. 32*P*

MASHITER K. *see* ADAMS E.F., BLOOM S.R., CH'NG J.L.C., JOPLIN G.F., MASHITER K., WEBSTER J.D. & WOOD S.M. Effects of a human pancreatic growth-hormone releasing factor on growth-hormone secretion in man. 84*P*

MATTHEWS B. *see* CLARK R.W. & MATTHEWS B. A comparison of the excitability of trigeminal brain-stem neurones in acutely and chronically prepared cats. 52*P*

MATTHEWS B. & ROBINSON P. Properties of regenerated intradental nerves in the cat. 56*P*

MATTHEWS P.B.C. Does the 'long-latency' component of the human stretch reflex depend after all upon spindle secondary afferents? 16*P*

MATTHEWS S.M. *see* GRIGGS R.C., MATTHEWS S.M., RENNIE M.J. & SUTTON J.R. Carbohydrate and fat metabolism at rest and during isometric forearm exercise in fed and fasted man. 69*P*

MAUGHAN R.J. *see* FENN C.E., LEIPER J.B., LIGHT I.M. & MAUGHAN R.J. Effects of the oral administration of fluid, electrolytes and substrate on endurance capacity in man. 66*P*

MAULE WALKER Felicity M. *see* DAVIS A.J., MAULE WALKER Felicity M. & SAUNDERS J.C. The role of prolactin in the control of the onset of copious milk secretion in the goat. 83*P*

MAYOR S.J. The effects of changes in external pH and osmolarity on mouse skeletal muscle. 43*P*

MEDILANSKI J. *see* MAIRE J.C., MEDILANSKI J. & STRAUB R.W. Effect of calcium ions on the release of purines by electrical activity in rabbit vagus nerve. 13*P*

MENCHETTI G. *see* COLOMO F., LOMBARDI V. & MENCHETTI G. Effects of AR-L 115BS on development of force-velocity relation and of isometric tension in frog single muscle fibres. 39*P*

MERCIER Barbara *see* GLICKSTEIN M., MERCIER Barbara & WHITTERIDGE D. The striate cortex input to the macaque pons: selectivity and demagnification. 77*P*

MEYER D.K. *see* KNEPEL W. & MEYER D.K. The effect of naloxone on vasopressin release from rat neurohypophysis incubated *in vitro*. 507

MIALL R.C. *see* KITNEY R.I., MIALL R.C., RIDDELL P.M. & STEIN J.F. Frequency analysis of neuronal signals recorded from the cerebellum in trained monkeys. 31*P*

MILEDI R., PARKER I. & ZHU P.H. Temperature dependence of calcium transients in frog twitch muscle fibres. 40*P*

MILLS Ivor H. & NEWPORT Pamela A. Persistence of the effect of intra-arterial infusion of the calcium antagonist verapamil on sodium and kallikrein excretion during meclofenamate infusion in the dog. 85*P*

MILNER A.D. *see* JEEVES M.A., MILNER A.D., PERRETT D.I. & SMITH P.A.J. Visual cells responsive to direction of movement and stimulus form in the anterior superior temporal sulcus of the macaque monkey. 80*P*

MILTON Richard L. *see* EISENBERG Robert S., McCARTHY Richard T. & MILTON Richard L. Paralysis of frog skeletal muscle fibres by the calcium antagonist D-600. 495

MUNDAY K.A. *see* CHAPMAN B.J., CHEN C.F. & MUNDAY K.A. Effects of anaesthetic agents on renal function in rats and on the renal responses to an acute intravenous saline load. 64*P*

MUNDAY K.A. *see* CHAPMAN B.J., MUNDAY K.A. & RADHI A.R.A.H. The effects of renal nerve stimulation in rats treated with α-adrenergic and dopaminergic blockers. 65*P*

MURPHY R.F. *see* CHEN M.H., JOFFE S.N., MAGEE D.F., MURPHY R.F. & NARUSE S. Cyclic changes of plasma pancreatic polypeptide and pancreatic secretion in fasting dogs. 453

NAKASATO M. *see* KATOH K., NAKASATO M., NISHIYAMA A. & SAKAI M. Activation of potassium transport induced by secretagogues in superfused submaxillary gland segments of rat and mouse. 371

NARUSE S. *see* CHEN M.H., JOFFE S.N., MAGEE D.F., MURPHY R.F. & NARUSE S. Cyclic changes of plasma pancreatic polypeptide and pancreatic secretion in fasting dogs. 453

NELSON M.T. *see* LEDERER W.J. & NELSON M.T. Effects of extracellular sodium on calcium efflux and membrane current in single muscle cells from the barnacle. 325

NEWPORT Pamela A. *see* MILLS Ivor H. & NEWPORT Pamela A. Persistence of the effect of intra-arterial infusion of the calcium antagonist verapamil on sodium and kallikrein excretion during meclofenamate infusion in the dog. 85*P*

NISHIYAMA A. *see* KATOH K., NAKASATO M., NISHIYAMA A. & SAKAI M. Activation of potassium transport induced by secretagogues in superfused submaxillary gland segments of rat and mouse. 371

NOBLE A.R. *see* GINESI Laura M. & NOBLE A.R. Effect of ouabain on release of active and inactive renin by rabbit kidney cortex slices. 86*P*

NOGUCHI Yutaka *see* HATA Fumiaki, ISHIDA Hajime, KAGAWA Kimiya, KONDO Etsuo, KONDO Shigeru & NOGUCHI Yutaka β-adrenoceptor alterations coupled with secretory response in rat parotid tissue. 185

NORMANTON J.R., PARISH D.C., SMYTH D.G. & WOLSTENCROFT J.H. Glyclyglutamine, the C-terminal dipeptide of β-endorphin, occurs in the brain stem and inhibits brain-stem neurones. 11*P*

NYE P.C.G. *see* KUMAR P. & NYE P.C.G. Chemoreceptor discharge in alternate breath tube- antitube-breathing cats. 48*P*

OHARA P.T. *see* BERRY D.J., JEFFERY G., LIEBERMAN A.R. & OHARA P.T. Relationships between the thalamic reticular nucleus and the brain stem reticular formation in the rat: a retrograde and anterograde tracing study using horseradish peroxidase (HRP) and wheat germ agglutinin-HRP (WGA-HRP). 54*P*

OYAMA Yasuo *see* AKAIKE Norio, HIRATA Akira, KIYOHARA Toshikazu & OYAMA Yasuo Neural regulation on the active sodium–potassium transport in hypokalaemic rat skeletal muscles. 245

PARISH D.C. *see* NORMANTON J.R., PARISH D.C., SMYTH D.G. & WOLSTENCROFT J.H. Glyclyglutamine, the C-terminal dipeptide of β-endorphin, occurs in the brain stem and inhibits brain-stem neurones. 11*P*

PARKER I. *see* MILEDI R., PARKER I. & ZHU P.H. Temperature dependence of calcium transients in frog twitch muscle fibres. 40*P*

PARKER K.H. & WINLOVE C.P. The measurement of oxygen diffusivity and solubility in tissue using a transient polarographic technique 45*P*

PASCOE J.E. *see* BISCOE T.J., DUCHEN M.R. & PASCOE J.E. Use of the RML 380Z microcomputer for on-line measurement of input resistance of cells in the mouse hippocampal slice. (D) 2*P*

PASCOE J.E. *see* ELLAWAY P.H., GARDNER-MEDWIN A.R. & PASCOE J.E. Decision limits for significance of changes in the cumulative sum (cusum) of the peristimulus time histogram. (D) 4*P*

PASCOE J.E. *see* BISCOE T.J., DUCHEN M.R. & PASCOE J.E. GABA/Benzodiazepine interactions in the mouse hippocampal slice. 8*P*

PASSATORE M. *see* KNOX C.K. & PASSATORE M. Static and dynamic analysis of cat pulmonary stretch receptors. (T) 87*P*

PATTERSON D.L. *see* CADDY K.W.T. & PATTERSON D.L. Application of a monoclonal antibody to explore cerebellar mouse mutants and development. (D) (T) 3*P*

PEICHL Leo & WÄSSLE Heinz The structural correlate of the receptive field centre of α ganglion cells in the cat retina. 309

PERRETT D.I. *see* JEEVES M.A., MILNER A.D., PERRETT D.I. & SMITH P.A.J. Visual cells responsive to direction of movement and stimulus form in the anterior superior temporal sulcus of the macaque monkey. 80*P*

PETIT J. *see* JAMI Léna, PETIT J., PROSKE U. & ZYTNICKI D. 'Driving' of tendon organ discharges during low-frequency stimulation of fast-contracting motor units in cat muscles. 18*P*

POGGIOLI Josiane *see* BERTHON Brigitte, BURGESS Gillian M., CAPIOD T., CLARET M. & POGGIOLI Josiane Mechanism of action of noradrenaline on the sodium–potassium pump in isolated rat liver cells. 25

POOLE Katrina J.V. & WHITE D.C.S. Stiffness and tension measurements in insect muscle in active and rigor states. 44*P*

PRINCE C.A. *see* BINDMAN Lynn J. & PRINCE C.A. Intracellular recording from neurones in the cerebral cortex of the anaesthetized rat. (D) 7*P*

PROSKE U. *see* JAMI Léna, PETIT J., PROSKE U. & ZYTNICKI D. 'Driving' of tendon organ discharges during low-frequency stimulation of fast-contracting motor units in cat muscles. 18*P*

RACK P.M.H., ROSS H.F. & THILMANN A.F. Response of normal and spastic ankles to sinusoidal movement. 17*P*

RADHI A.R.A.H. *see* CHAPMAN B.J., MUNDAY K.A. & RADHI A.R.A.H. The effects of renal nerve stimulation in rats treated with α-adrenergic and dopaminergic blockers. 65*P*

RAKOTONIRINA V.S. *see* DÉLÈZE J. & RAKOTONIRINA V.S. Membrane potential, contractile activity and repriming of frog muscle fibres in solutions of low ionic content. 42*P*

RANATUNGA K.W. Influence of temperature on the shortening velocity of rat skeletal muscle. 40*P*

REGGIANI C. *see* EDMAN K.A.P. & REGGIANI C. The descending limb of the length-tension relation studied in short, length-clamped segments of frog muscle fibres. 41*P*

RENNIE M.J. *see* GRIGGS R.C., MATTHEWS S.M., RENNIE M.J. & SUTTON J.R. Carbohydrate and fat metabolism at rest and during isometric forearm exercise in fed and fasted man. 69*P*

RENNIE M.J. *see* BABIJ P., GERBER P.P.G. & RENNIE M.J. The effect of fasting on ammonia and amino acid balance of rat hindlimb tissue. 70*P*

RICKETS C. *see* ALLEN Y., BISCOE T.J., FRY J.P., RICKETS C. & ROBBINS J. Quantitative autoradiography of benzodiazepine binding in the central nervous system of the mutant mouse *Spastic*. (D) (T) 8*P*

RIDDELL P.M. *see* KITNEY R.I., MIALL R.C., RIDDELL P.M. & STEIN J.F. Frequency analysis of neuronal signals recorded from the cerebellum in trained monkeys. 31*P*

ROBBINS J. *see* ALLEN Y., BISCOE T.J., FRY J.P., RICKETS C. & ROBBINS J. Quantitative autoradiography of benzodiazepine binding in the central nervous system of the mutant mouse *Spastic*. (D) (T) 8*P*

ROBERTS R.C. *see* ILES J.F. & ROBERTS R.C. Presynaptic inhibition of monosynaptic reflexes from soleus muscle in spastic human subjects. 29*P*

ROBINSON P. *see* MATTHEWS B. & ROBINSON P. Properties of regenerated intradental nerves in the cat. 56*P*

ROBSON J.G. *see* ENROTH-CUGELL Christina, ROBSON J.G., SCHWEITZER-TONG D.E. & WATSON A.B. Spatio-temporal interactions in cat retinal ganglion cells showing linear spatal summation. 279

RODDIE I.C. *see* MCHALE N.G. & RODDIE I.C. The effect of intravenous adrenaline and noradrenaline infusion on peripheral lymph flow in the sheep. 517

ROSS H.F. *see* RACK P.M.H., ROSS H.F. & THILMANN A.F. Response of normal and spastic ankles to sinusoidal movement. 17*P*

ROST I. *see* CHRISTAKOS C.N., ROST I. & WINDHORST U. Modulation of muscle stretch receptor discharge by motor unit activity in the cat as revealed by spectral analysis. 17*P*

ROTHWELL J.C. *see* COWAN J., DAY B.L., MARSDEN C.D. & ROTHWELL J.C. Effect of sub-threshold motor cortical shocks on the human spinal monosynaptic reflex. 32*P*

RUDY T.A. *see* LOPACHIN Richard M. & RUDY T.A. Sites and mechanism of action for the effects of intrathecal noradrenaline on thermoregulation in the rat. 527

SAKAI M. *see* KATOH K., NAKASATO M., NISHIYAMA A. & SAKAI M. Activation of potassium transport induced by secretagogues in superfused submaxillary gland segments of rat and mouse. 371

SAKMANN B. *see* BORMANN J., SAKMANN B. & SIEFERT W. Isolation of GABA-activated single-channel Cl^- currents in the soma membrane of rat hippocampal neurones. 9*P*

SARGEANT A.J. Effect of muscle temperature on maximal short-term power output in man. 35*P*

SAUMET J.-L. *see* DAWSON N.J., HELLON R.F. & SAUMET J.-L. Which classes of neurones project to the thalamus from the marginal layer of trigeminal nucleus caudalis in cats? 49*P*

SAUNDERS J.C. *see* DAVIS A.J., MAULE WALKER Felicity M. & SAUNDERS J.C. The role of prolactin in the control of the onset of copious milk secretion in the goat. 83*P*

SAWYER S.L. *see* FETZ E.E. & SAWYER S.L. Facilitation of individual forelimb motor units by single intracortical microstimuli in behaving monkeys. 19*P*

SCHMALZ P.F. *see* ANGEL Fabielle, GO V.L.W., SCHMALZ P.F. & SZURSZEWSKI J.H. Vasoactive intestinal peptide: a putative transmitter in the canine gastric muscularis mucosa. 641

SCHÜMPERLI R.A. *see* KOVÁCS L., SCHÜMPERLI R.A. & SZŰCS G. Comparison of birefringence signals and calcium transients in voltage-clamped cut skeletal muscle fibres of the frog. 579

SCHWEITZER-TONG D.E. *see* ENROTH-CUGELL Christina, ROBSON J.G., SCHWEITZER-TONG D.E. & WATSON A.B. Spatio-temporal interactions in cat retinal ganglion cells showing linear spatal summation. 279

SEARS T.A. *see* BOSTOCK H., SEARS T.A. & SHERRATT R.M. The spatial distribution of excitability and membrane current in normal and demyelinated mammalian nerve fibres. 41

SEARS T.A. *see* KONISHI T. & SEARS T.A. Electrical activity of mouse motor nerve terminals. 57*P*

SEJNOWSKI T.J. *see* KUFFLER S.W. & SEJNOWSKI T.J. Peptidergic and muscarinic excitation at amphibian sympathetic synapses. 257

SHEPLEY M.P., STRICHARTZ G.R. & WANG G.K. Local anaesthetics block non-activating sodium channels in a use-dependent manner in amphibian myelinated axons. 62*P*

SHERRATT R.M. *see* BOSTOCK H., SEARS T.A. & SHERRATT R.M. The spatial distribution of excitability and membrane current in normal and demyelinated mammalian nerve fibres. 41

SHIRLEY D.G. *see* AL-OMAR AZZAWI S. & SHIRLEY D.G. The effect of vasopressin on renal blood flow and its distribution in the rat. 233

SIEFERT W. *see* BORMANN J., SAKMANN B. & SIEFERT W. Isolation of GABA-activated single-channel Cl^- currents in the soma membrane of rat hippocampal neurones. 9*P*

SIMPKINS James W. *see* KATOVICH Michael J. & SIMPKINS James W. Effects of chronic hyperprolactinaemia on experimentally induced thirsts in male rats. 75

SKELTON J.L. L-Glutamate can produce large potential changes in rat cortex without initiating spreading depression. 12*P*

SMITH M.W. *see* DAUNCEY M.J., INGRAM D.L., JAMES P.S. & SMITH M.W. Modification by diet and environmental temperature of enterocyte function in piglet intestine. 441

SMITH P.A.J. *see* JEEVES M.A., MILNER A.D., PERRETT D.I. & SMITH P.A.J. Visual cells responsive to direction of movement and stimulus form in the anterior superior temporal sulcus of the macaque monkey. 80*P*

SMITH T. *see* EDMONDS C.J., EDWARDS R.H.T., MACKENZIE Jennifer & SMITH T. Changes of body composition in muscular dystrophy. 71*P*

SMYTH D.G. *see* NORMANTON J.R., PARISH D.C., SMYTH D.G. & WOLSTENCROFT J.H. Glyclyglutamine, the C-terminal dipeptide of β-endorphin, occurs in the brain stem and inhibits brain-stem neurones. 11*P*

STANSFELD C.E. & WALLIS D.I. Differences in tetrodotoxin (TTX)-sensitivity in group A- and C-cells of the rabbit nodose ganglion. 14*P*

STEIN J.F. *see* KITNEY R.I., MIALL R.C., RIDDELL P.M. & STEIN J.F. Frequency analysis of neuronal signals recorded from the cerebellum in trained monkeys. 31*P*

STRAUB R.W. *see* MAIRE J.C., MEDILANSKI J. & STRAUB R.W. Effect of calcium ions on the release of purines by electrical activity in rabbit vagus nerve. 13*P*

STRICHARTZ G.R. *see* SHEPLEY M.P., STRICHARTZ G.R. & WANG G.K. Local anaesthetics block non-activating sodium channels in a use-dependent manner in amphibian myelinated axons. 62*P*

SUCH G. *see* JANCSÓ G. & SUCH G. Effects of capsaicin applied perineurally to the vagus nerve on cardiovascular and respiratory functions in the cat. 359

SUTTON J.R. *see* GRIGGS R.C., MATTHEWS S.M., RENNIE M.J. & SUTTON J.R. Carbohydrate and fat metabolism at rest and during isometric forearm exercise in fed and fasted man. 69*P*

SVENDSEN E. & TINDALL A. The circumferential length of the internal elastic membrane measured by computer digitizer morphology and its relation to *in vivo* rabbit aorta diameter. (T) 45*P*

SWETT J.E. & WOOLF C.J. The cutaneous contribution to the biceps femoris flexor reflex in the rat. 20*P*

SZŰCS G. *see* KOVÁCS L. & SZŰCS G. Effect of caffeine on intramembrane charge movement and calcium transients in cut skeletal muscle fibres of the frog. 559

SZŰCS G. *see* KOVÁCS L., SCHÜMPERLI R.A. & SZŰCS G. Comparison of birefringence signals and calcium transients in voltage-clamped cut skeletal muscle fibres of the frog. 579

SZURSZEWSKI J.H. *see* ANGEL Fabielle, GO V.L.W., SCHMALZ P.F. & SZURSZEWSKI J.H. Vasoactive intestinal peptide: a putative transmitter in the canine gastric muscularis mucosa. 641

THILMANN A.F. *see* RACK P.M.H., ROSS H.F. & THILMANN A.F. Response of normal and spastic ankles to sinusoidal movement. 17*P*

THOMAS R.C. *see* EVANS M.G. & THOMAS R.C. The effects of acid solutions on intracellular pH and Na in snail neurones. 60*P*

TINDALL A. *see* SVENDSEN E. & TINDALL A. The circumferential length of the internal elastic membrane measured by computer digitizer morphology and its relation to *in vivo* rabbit aorta diameter. (T) 45*P*

TODD K. *see* EVERITT B.J., LIGHTMAN S.L. & TODD K. Brain stem noradrenergic pathways modulate vasopressin secretion in the rat. 81*P*

TRENTHAM D.R. *see* FERENCZI M.A., HOMSHER E. & TRENTHAM D.R. A new method for measuring the kinetics of adenosine triphosphate (ATP) cleavage in single glycerinated rabbit muscle fibres. 37*P*

UMBACH J. A. *see* BAKER P.F. & UMBACH J. A. Calcium electrode determination of ionized Ca and Ca-buffering capacity of squid axoplasm. 61*P*

URBAN B.W. *see* HAYDON D.A. & URBAN B.W. The action of alcohols and other non-ionic surface active substances on the sodium current of the squid giant axon. 411

URBAN B.W. *see* HAYDON D.A. & URBAN B.W. The effects of some inhalation anaesthetics on the sodium current of the squid giant axon. 429

VAEGAN *see* ARDEN G.B. & VAEGAN Electroretinograms evoked in man by local uniform or patterned stimulation. 85

VAUGHAN-JONES R.D. *see* EISNER D.A., LEDERER W.J. & VAUGHAN-JONES R.D. The relationship between twitch tension and intracellular Na activity in sheep cardiac Purkinje fibres. 28*P*

WALKER D.W. *see* CLEWLOW F., DAWES G.S., JOHNSTON Barbara M. & WALKER D.W. Changes in breathing, electrocortical and muscle activity in unanaesthetized fetal lambs with age. 463

WALL P.D. *see* MCMAHON S.B. & WALL P.D. The effects of capsaicin applied locally to the peripheral nerves of adult rats on lamina I neurones. 53*P*

WALLIS D.I. *see* STANSFELD C.E. & WALLIS D.I. Differences in tetrodotoxin (TTX)-sensitivity in group A- and C-cells of the rabbit nodose ganglion. 14*P*

WALOGA Geraldine Effects of calcium and guanosine-3′:5′-cyclic-monophosphoric acid on receptor potentials of toad rods. 341

WANG G.K. *see* SHEPLEY M.P., STRICHARTZ G.R. & WANG G.K. Local anaesthetics block non-activating sodium channels in a use-dependent manner in amphibian myelinated axons. 62*P*

WANLESS R.B. Effects of noradrenaline on the ouabain-sensitive rubidium uptake of guinea-pig ventricle. 26*P*

WARNER Anne *see* ENTWISTLE A., WARNER Anne & ZALIN Rosalind Is avaian myoblast fusion controlled by voltage-dependent calcium entry? 21*P*

WÄSSLE Heinz *see* PEICHL Leo & WÄSSLE Heinz The structural correlate of the receptive field centre of α ganglion cells in the cat retina. 309

WATSON A.B. *see* ENROTH-CUGELL Christina, ROBSON J.G., SCHWEITZER-TONG D.E. & WATSON A.B. Spatio-temporal interactions in cat retinal ganglion cells showing linear spatal summation. 279

WEBSTER J.D. *see* ADAMS E.F., BLOOM S.R., CH'NG J.L.C., JOPLIN G.F., MASHITER K., WEBSTER J.D. & WOOD S.M. Effects of a human pancreatic growth-hormone releasing factor on growth-hormone secretion in man. 84*P*

WEEMS W.A. *see* DECKTOR D.L. & WEEMS W.A. An intracellular characterization of neurones and neural connexions within the left coeliac ganglion of cats. 197

WERBLIN Frank S. *see* ATTWELL D.I., WERBLIN Frank S., WILSON Martin & WU Samuel M. Properties of double cones in the larval salamander retina. 74*P*

WHEAL H.V. *see* BLISS T.V.P., LANCASTER B. & WHEAL H.V. Long-term potentiation in commissural and Schaffer projections to hippocampal CA1 cells: an *in vivo* study in the rat. 617

WHITE D.C.S. *see* POOLE Katrina J.V. & WHITE D.C.S. Stiffness and tension measurements in insect muscle in active and rigor states. 44*P*

WHITE M.J. *see* DAVIES C.T.M. & WHITE M.J. Effects of disuse muscular atrophy on the mechanical properties of triceps surae in man. 34*P*

WHITTERIDGE D. *see* GLICKSTEIN M., MERCIER Barbara & WHITTERIDGE D. The striate cortex input to the macaque pons: selectivity and demagnification. 77*P*

WILKINSON J. Stimulation and inhibition of acid secretion by electrical field stimulation in the rat isolated stomach. 67*P*

WILLS N.K. *see* LEWIS S.A. & WILLS N.K. Apical membrane permeability and kinetic properties of the sodium pump in rabbit urinary bladder. 169

WILSON Martin *see* ATTWELL D.I., WERBLIN Frank S., WILSON Martin & WU Samuel M. Properties of double cones in the larval salamander retina. 74*P*

WINDHORST U. *see* CHRISTAKOS C.N., ROST I. & WINDHORST U. Modulation of muscle stretch receptor discharge by motor unit activity in the cat as revealed by spectral analysis. 17*P*

WINLOVE C.P. *see* PARKER K.H. & WINLOVE C.P. The measurement of oxygen diffusivity and solubility in tissue using a transient polarographic technique 45*P*

WOLSTENCROFT J.H. *see* NORMANTON J.R., PARISH D.C., SMYTH D.G. & WOLSTENCROFT J.H. Glyclyglutamine, the C-terminal dipeptide of β-endorphin, occurs in the brain stem and inhibits brain-stem neurones. 11*P*

WOLSTENCROFT J.H. *see* CERVERO F. & WOLSTENCROFT J.H. Spinal cord neurones in the cat projecting to and excited from nucleus raphe magnus and the adjacent reticular formation. 55*P*

WOOD L.M. *see* DALY M. De Burgh & WOOD L.M. Effects of distension of the urinary bladder on the respiratory and cardiovascular responses elicited by stimulation of the carotid body chemoreceptors in the dog. 47*P*

WOOD S.M. *see* ADAMS E.F., BLOOM S.R., CH'NG J.L.C., JOPLIN G.F., MASHITER K., WEBSTER J.D. & WOOD S.M. Effects of a human pancreatic growth-hormone releasing factor on growth-hormone secretion in man. 84*P*

WOOLF C.J. *see* SWETT J.E. & WOOLF C.J. The cutaneous contribution to the biceps femoris flexor reflex in the rat. 20*P*

WOOSTER M.J. *see* LEIGHTON M.J. & WOOSTER M.J. Guinea-pig olfactory cortex slices under hyperbaric conditions. (D) 3*P*

WU Samuel M. *see* ATTWELL D.I., WERBLIN Frank S., WILSON Martin & WU Samuel M. Properties of double cones in the larval salamander retina. 74*P*

YEO C.H. *see* GLICKSTEIN M., HARDIMAN M.J. & YEO C.H. The effects of cerebellar lesions on the conditioned nictitating membrane response of the rabbit. 30*P*

ZALIN Rosalind *see* ENTWISTLE A., WARNER Anne & ZALIN Rosalind Is avaian myoblast fusion controlled by voltage-dependent calcium entry? 21*P*

ZEKI S. A demonstration of 'void' colours and 'natural' colours. (D) 1*P*

ZEKI S. Abnormal callosal connections of macaque monkey visual cortex. 78*P*

ZHU P.H. *see* MILEDI R., PARKER I. & ZHU P.H. Temperature dependence of calcium transients in frog twitch muscle fibres. 40*P*

ZYTNICKI D. *see* JAMI Léna, PETIT J., PROSKE U. & ZYTNICKI D. 'Driving' of tendon organ discharges during low-frequency stimulation of fast-contracting motor units in cat muscles. 18*P*